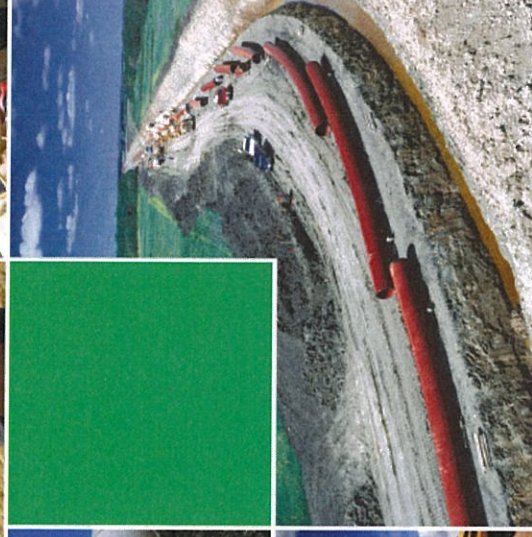
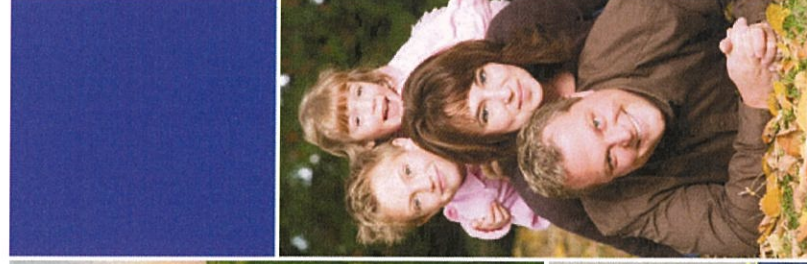


CA - Communication

CW (ws)

MARCH 4, 2014 - Item #1



Proposed King's North Connection Project

March 4, 2014

Committee of the Whole Meeting

City of Vaughan



King's North Connection Project



We are here to:

- Provide general information about TransCanada
- Introduce TransCanada's proposed King's North Connection project
- Outline the regulatory approval process
- Answer your questions and receive your comments

Who is TransCanada?

- With more than 60 years of experience, TransCanada is a leader in the responsible development and reliable operation of North American energy infrastructure
- TransCanada moves 20% of North America's natural gas from supply to market
- TransCanada owns or has interests in over 11,800 megawatts of power generation in Canada and the United States, enough energy to power 11 million homes



TransCanada in Ontario



- Owns and operates nearly 8,000 kilometres of natural gas transmission pipeline
- Generates approximately 3,500 megawatts of electricity, enough to power 3.5 million homes
- Employs approximately 250 permanent staff as well as hundreds of additional specialized contractors
- Pays more than \$33 million annually in salaries
- Pays more than \$74 million annually in property taxes
- Contributed more than \$11 million to community organizations in the last decade

TransCanada's existing pipeline facilities in Vaughan



- TransCanada currently operates 31 km of natural gas transmission pipeline and associated facilities in the City of Vaughan running northwest between Highway 50 and Bathurst Street
- Includes the Maple Compressor Station on Weston Road and a meter station on Bathurst St.
- TransCanada paid \$622,693 in municipal taxes to the City of Vaughan in 2013

Recent TransCanada Construction Projects

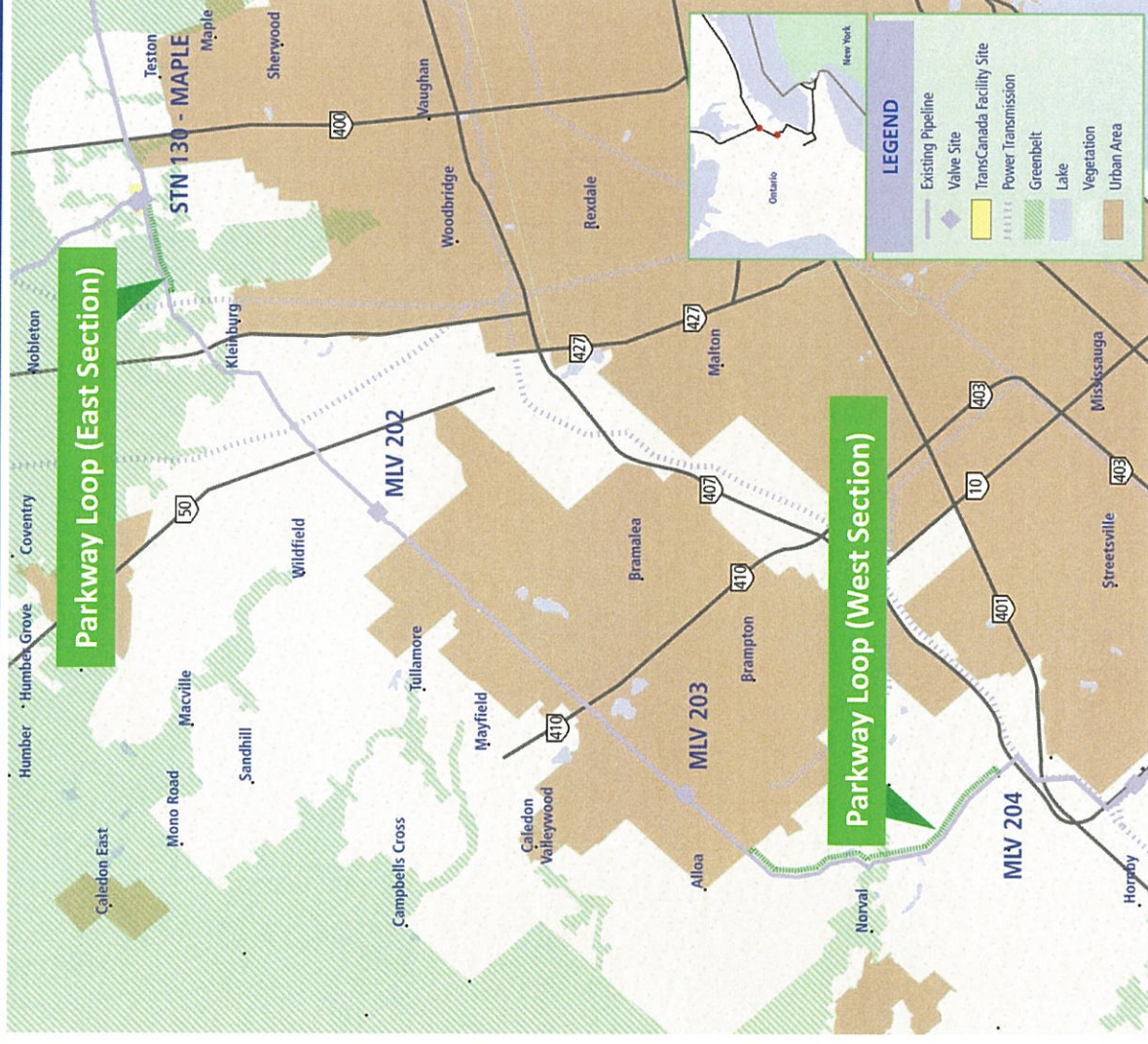


Parkway Loop

- In-service February 2013

Maple Compressor Station Upgrade

- In service November 2013
- Two new compressor units added at the Maple Compressor Station



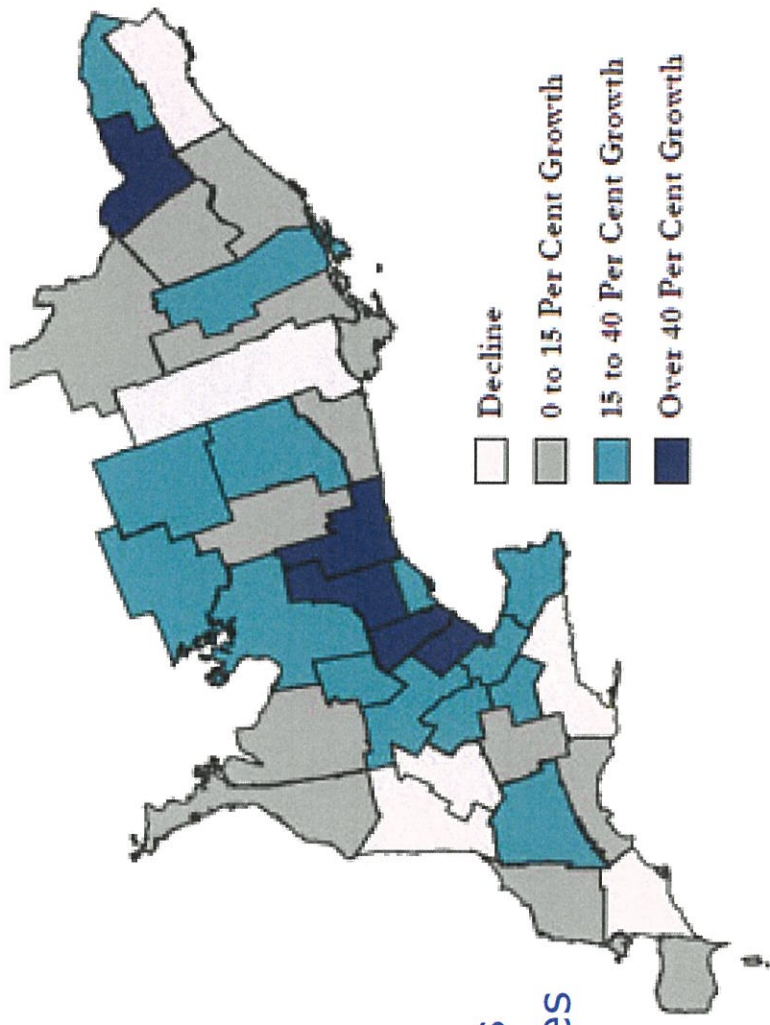
Commercial Need



Key Drivers:

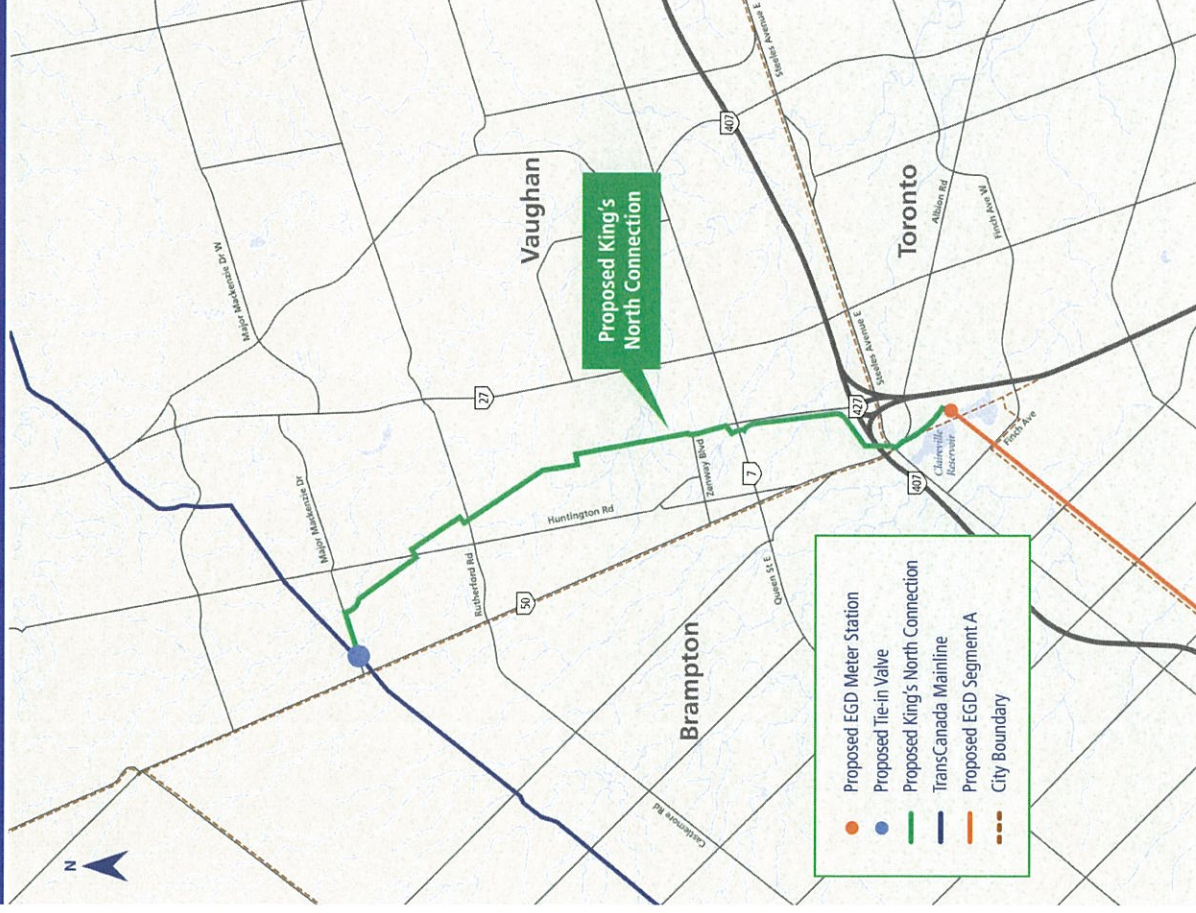
- Meet customer demand in Ontario and Eastern Canada
- Improve access to new natural gas supplies
- Increase secure supply and distribution of natural gas throughout the region
- TransCanada Mainline traverses approximately 150 municipalities in Ontario, transporting natural gas to support the growth of the economy

Population growth/decline by census division 2012 - 2036



Source: Ontario Ministry of Finance

What is the King's North Connection project and why do we need it?



The proposed King's North Connection will:

- Connect two natural gas pipeline systems:
 - Enbridge's new Segment A pipeline of the approved GTA Project, at its existing Albion Road site in Toronto; and
 - TransCanada's existing Mainline at Major Mackenzie Drive in Vaughan
- Provide homes, businesses, schools and hospitals in Ontario and Eastern Canada with a safe, reliable and diverse source of natural gas to meet growing demand

Project Details

The King's North Connection will:

- Establish a new pipeline right-of-way in the Cities of Vaughan, Brampton and Toronto
- Be approximately 13 kilometres in length, depending on the final route
- Contain one 36" diameter natural gas transmission pipeline in an 18 metre wide permanent easement

Approximately 80% of the route will parallel with the proposed Hwy 427 extension and existing hydro corridor



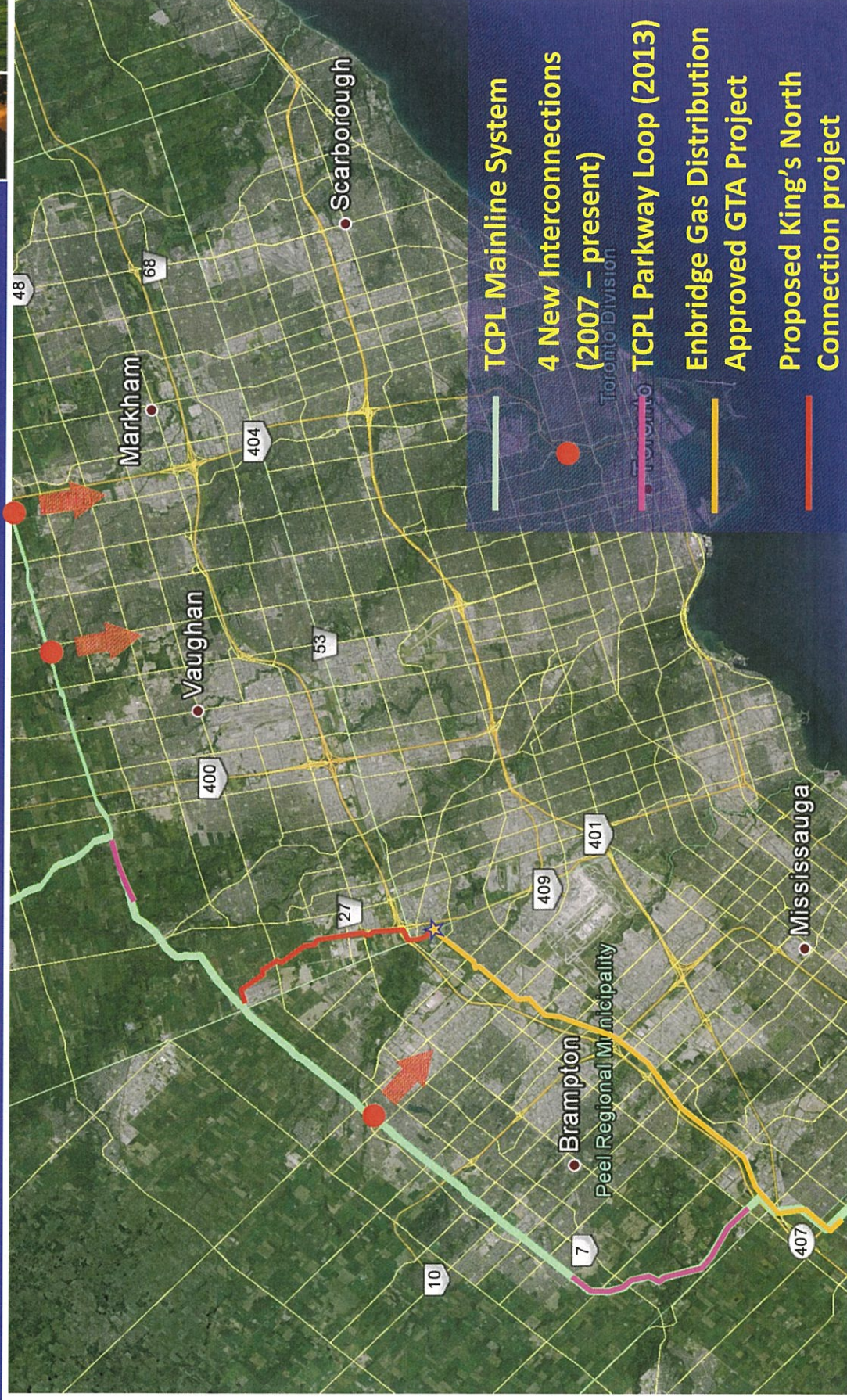
Key Project Dates



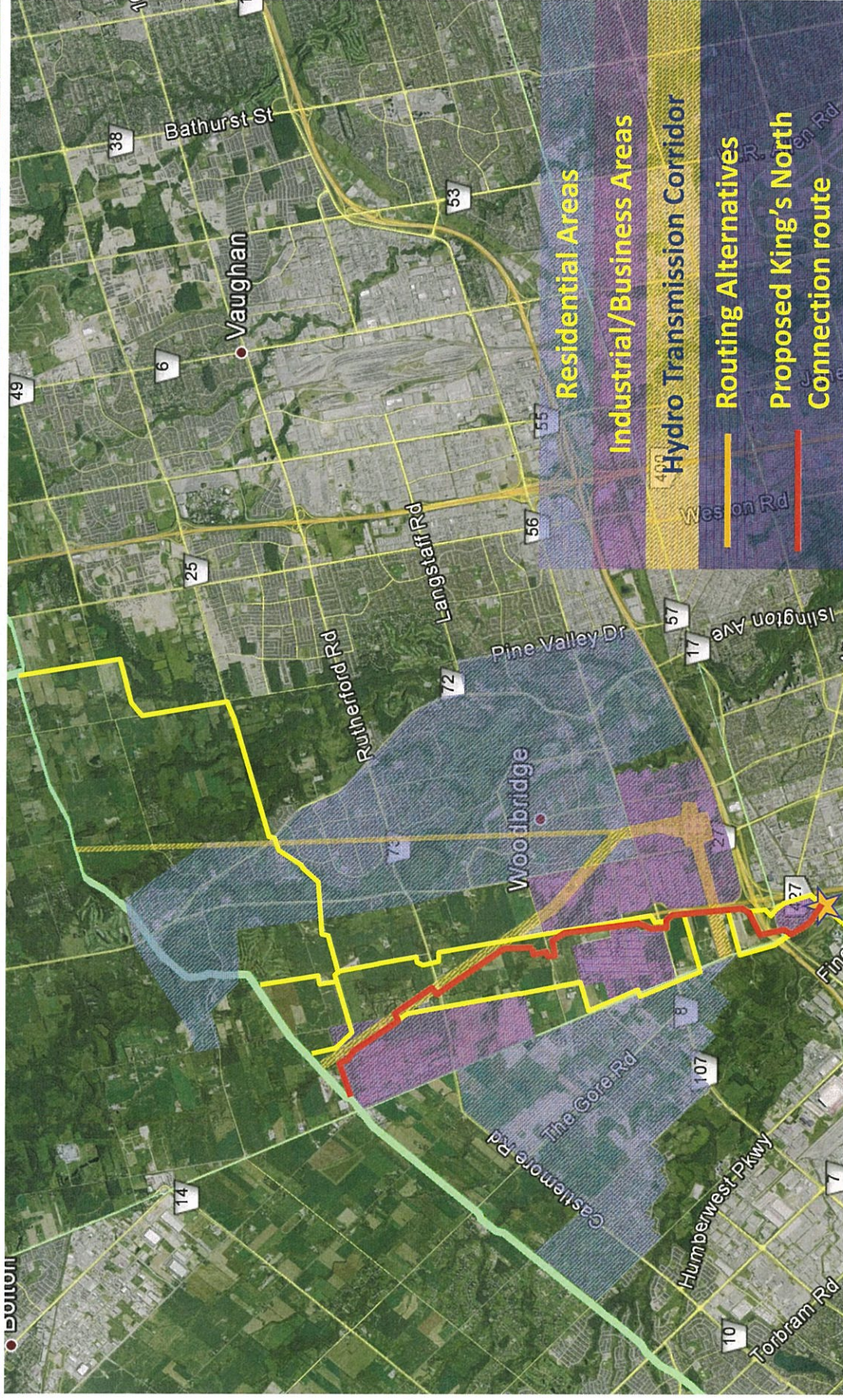
Project Schedule

Aboriginal & Stakeholder Engagement	December 2013 - ongoing
Submit application to the National Energy Board	Summer 2014
Construction start (pending approvals)	Spring 2015
Pipeline in service	Fall/Winter 2015

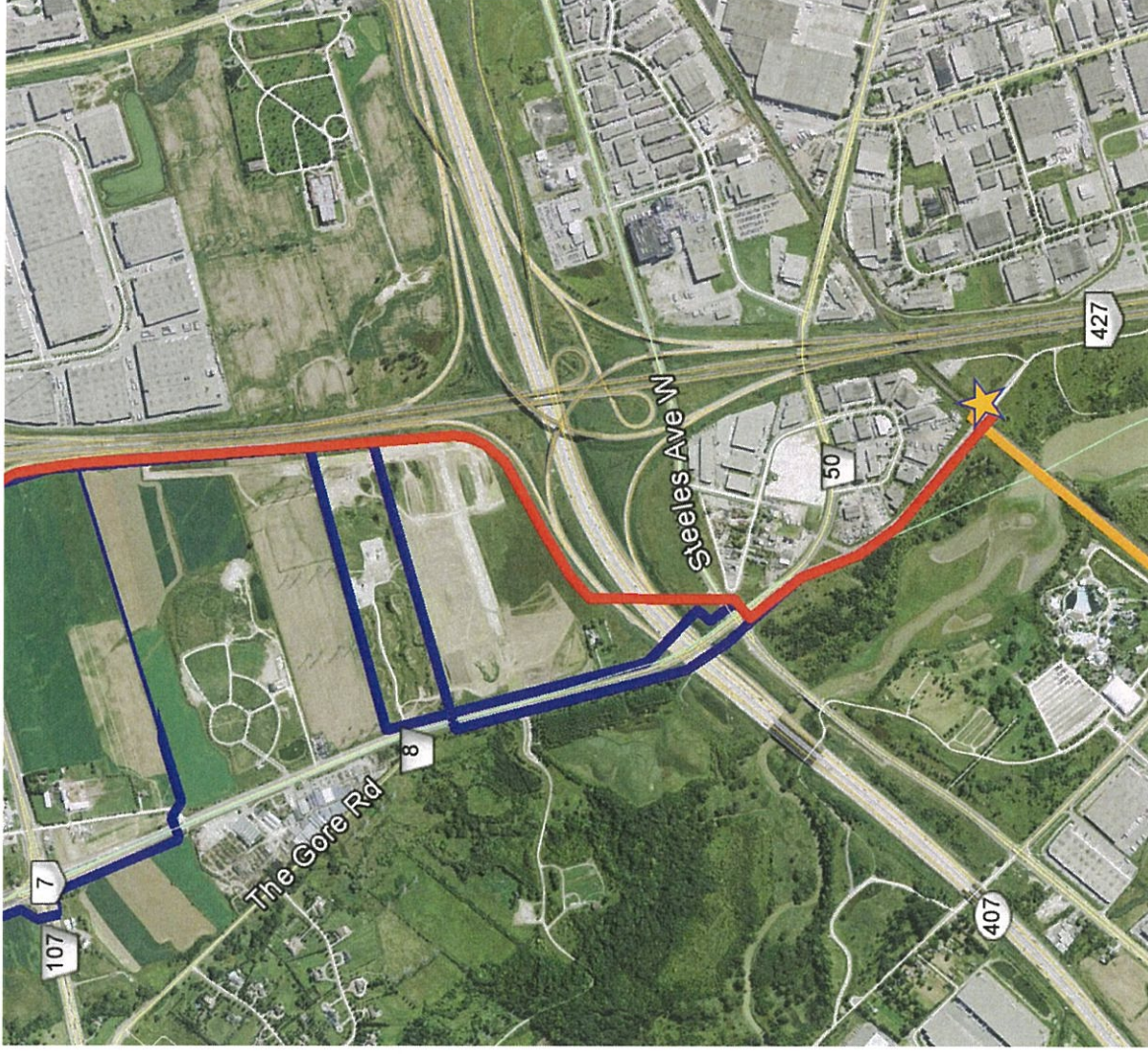
TCPL System and Growing Demand



Routing Constraints and Considerations 1/3



Routing Constraints and Considerations 2/3

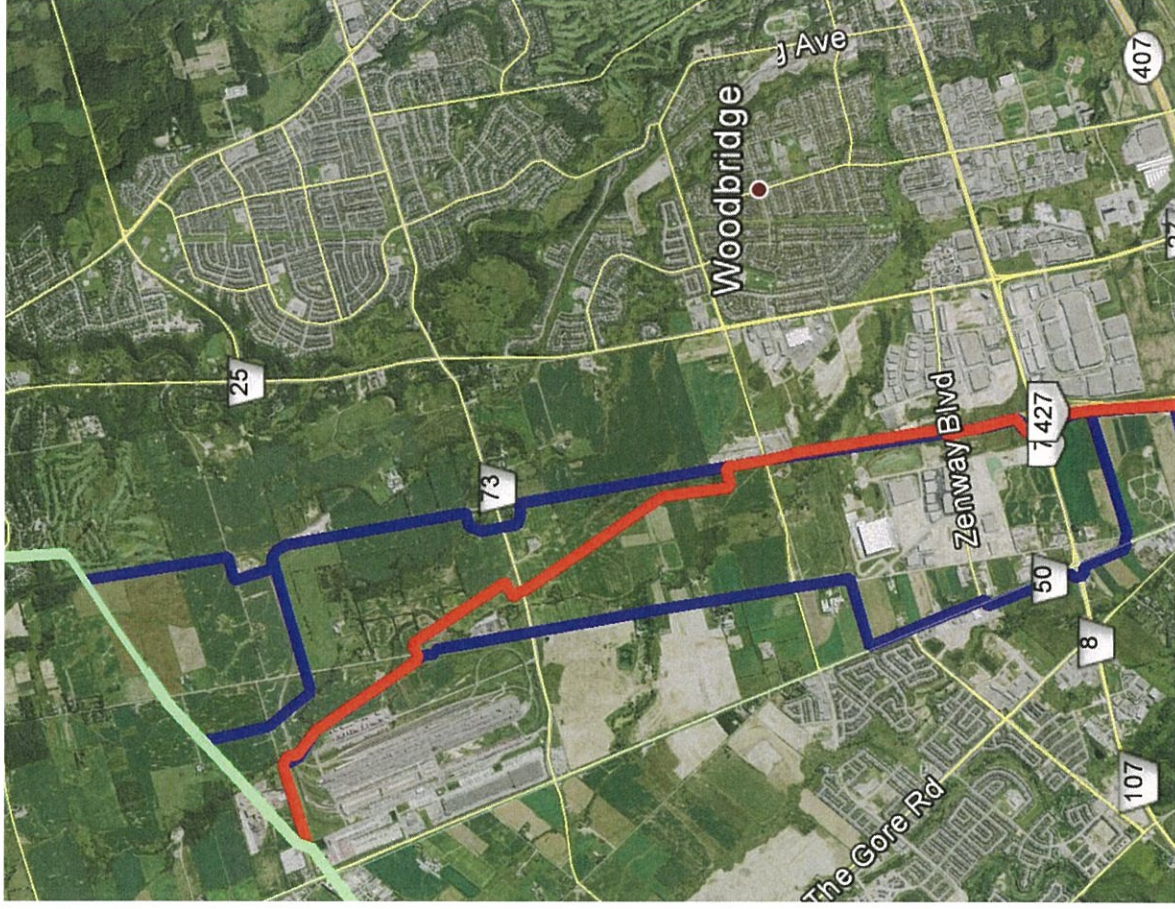


- Only one route from the starting point at Albion; no alternatives exist
- The crossing of Highway 407 determines the entry point into Vaughan
- All crossing methods are being investigated

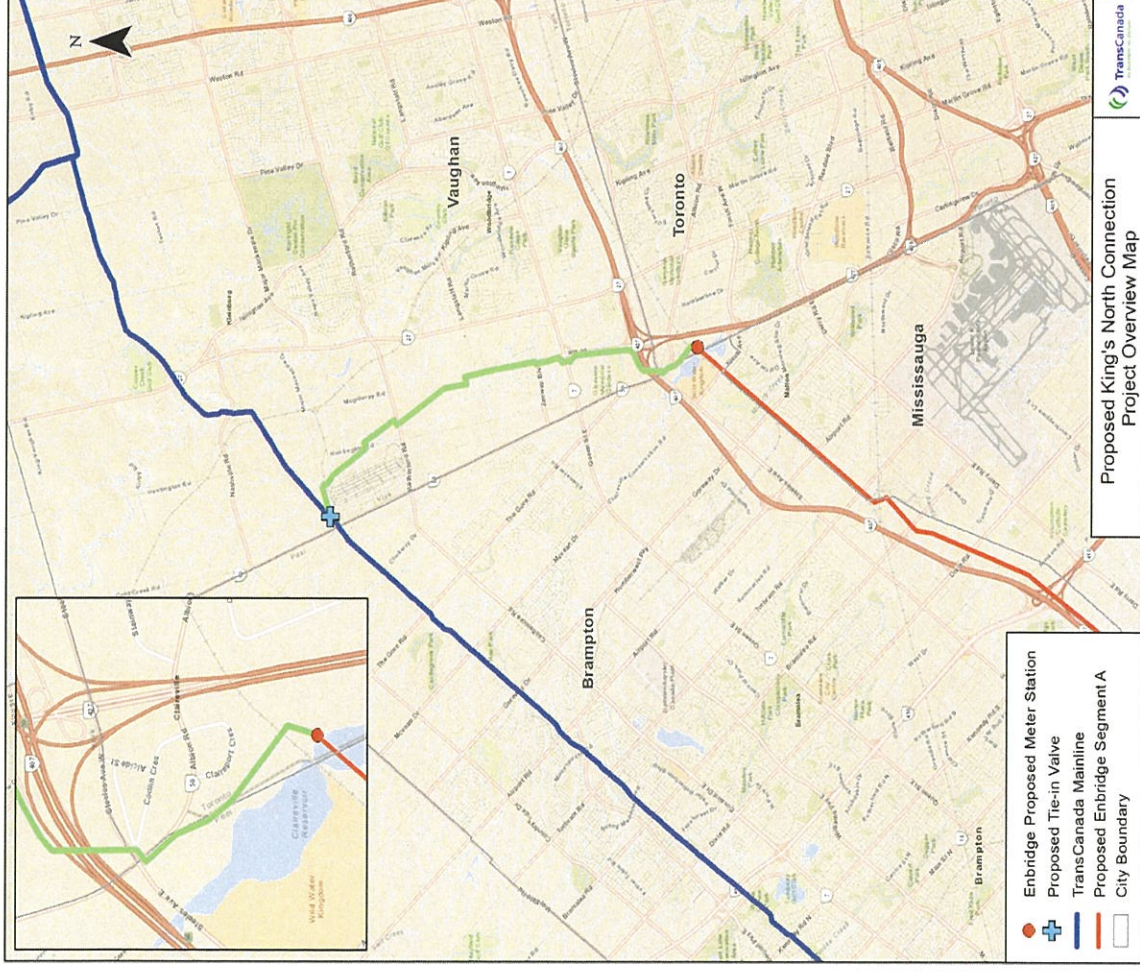
Routing Constraints and Considerations 3/3



- Developments underway, at different stages of completion
- Highway 427 Extension is initiated
- Hydro Transmission Corridor has a planned fourth line that will fill their easement
- A proposed road west of the 427 Extension may affect the routing
- Proposed transit-way and parking will add constraints adjacent to the 427 Extension



Proposed Route



- **Primarily east of Highway 50 between Albion Road in Toronto and Major Mackenzie Drive in Vaughan**
- **Tie-in to a new meter station at Enbridge's Albion Road facility in Toronto**
- **New Mainline valve site south of Major Mackenzie Drive in Vaughan**
- **Brampton section crosses Hwy 50 south of Hwy 407**

New Easement Lands



- The right-of-way (ROW) land is retained by the owner who enters into an easement agreement with TransCanada
- The easement agreement will specify a number of conditions on the use and alteration of the ROW lands such as:
 - ensuring unfettered TransCanada access for operations and maintenance
 - excluding structures and pavement on the ROW
- TransCanada has been working with municipalities, landowners and developers for several decades to maximize compatibility between various land uses and the pipeline right-of-way (e.g. green space, pathways)

Obtaining New Easement Lands



- TransCanada will affect some lands planned for development
- Landowners will be compensated at appraised market value for all lands encumbered by the new easement and for any loss of value to the remaining lands where applicable
- Landowners will also be compensated for all lands used on a temporary basis during construction, but not permanently encumbered

Crossing Features



9 Road Crossings

Indian Line
Albion Road
Steeles Avenue East
Highway 407
Highway 7
Zenway Boulevard
Langstaff Road
Rutherford Road
Huntington Road

Water Crossings

Data collected to date identifies approx. 15 water crossings. Field surveys will verify the findings.

Other Features

The Claireville Conservation Area
CN Rail line
CP Intermodal facility
Employment lands

Benefits of King's North Connection



The Environmental and Socio-economic Assessment will consider anticipated benefits such as:

- local spending on goods and services during construction
- Use of local subcontractors during
- Increased tax payments by TransCanada

Additional contributions from TransCanada specific to local initiatives.

Time Check . . .



Remaining topics include:

- High-level summary of the NEB process and other potential permitting considerations
- Environmental considerations
- Aboriginal and other Stakeholder engagement
- Pipeline Safety, Integrity, and Maintenance

National Energy Board



- The NEB acts in the Canadian public interest by ensuring safety and security, environmental protection and efficient pipelines
- Once an application is submitted, stakeholders have a continued opportunity to participate in the regulatory review process
- After an application is submitted, the NEB will assess it and determine what type of regulatory review process is required
- The NEB's involvement in a project does not end with an approval to construct - the NEB will attach any number of conditions to project approvals which it then monitors and enforces throughout the lifecycle of the project

Permitting - Approvals



National Energy Board (NEB) Section 58 Application.

- Less than 40 km in length
- Environmental & Socio-Economic Assessment required
- We will work with stakeholders throughout the full project cycle



Other Federal, Provincial and Municipal permits/approvals will be required.

- These will be identified as the project team prepares the NEB application

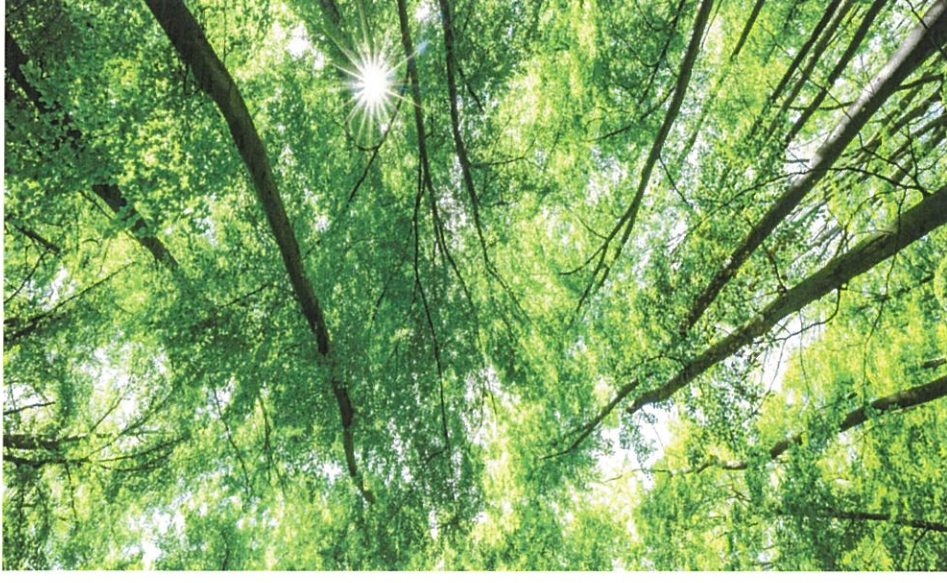


Key Environmental Considerations



Biophysical field studies include:

- Soils
- Vegetation and Wetlands
- Wildlife – Species at Risk
- Fish and Fish Habitat
- Air Quality and Noise
- Hydrogeology and Hydrology
- Archaeology/Heritage Resources



Aboriginal & Stakeholder Engagement Program



Ensuring all Aboriginal Communities & Stakeholders have:

- Information about the project
- An opportunity to provide input and,
- An understanding of how that input is incorporated into project planning and implementation



Aboriginal & Stakeholder Engagement



Phased outreach to:

- Municipalities
- Aboriginal communities
- Directly affected landowners and occupants
- Other Stakeholders



Outreach will be ongoing throughout the project and will include:

- Face-to-face meetings
- Mailings, advertising
- Public Open House (s)



Pipeline Safety

Safety is a core value at TransCanada. We make safety – for employees, contractors and members of the community – an integral part of the way we design, construct and operate our pipeline facilities.



Safety Facts:

- Pipelines are the safest mode of transportation for energy products
- TransCanada has extensive programs to monitor, inspect and maintain our pipeline facilities
- We constantly improve our practices using new technology and developments

Pipeline Safety and Integrity

TransCanada is committed to building and operating our natural gas transportation systems safely. From design and construction to operation and maintenance, safety is an integral part of everything we do.

Design:

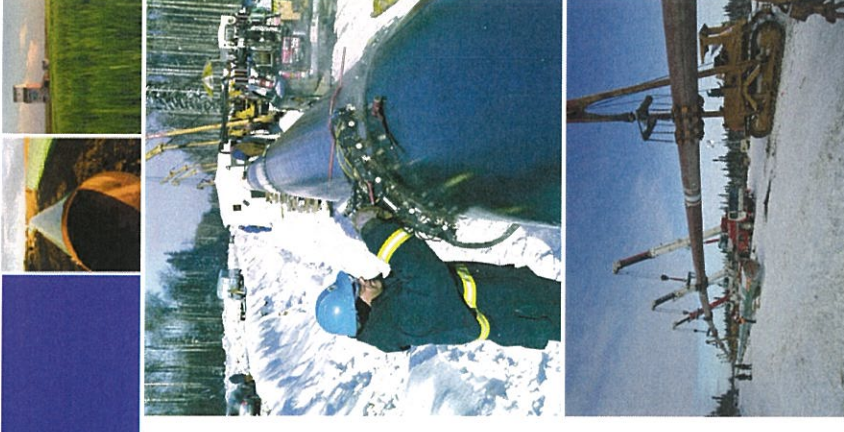
- TransCanada uses top quality steel and welding techniques throughout our 68,500 kilometre natural gas pipeline network
- We take additional safety precautions where pipelines cross roads, railway tracks, waterways and in areas of high population

Construction:

- During construction, all welds are checked by x-ray or ultrasonic examination to ensure the welds are sound
- To protect against corrosion, the external surface of the pipeline is coated

Operations:

- The entire system is monitored 24 hours a day by highly trained TransCanada employees from a computerized control centre



Pipeline Maintenance



Ongoing maintenance is performed on all portions of the pipeline system to monitor, inspect and maintain the integrity of our pipeline facilities. Some of these programs include:

Hydrostatic Testing:

- Safely verifies the integrity of the pipeline and welds by pressure testing the pipeline with water

Cathodic Protection:

- Application of cathodic protection, a low-voltage current which protects the pipe from corrosion

In-Line Inspection:

- Also referred to as “pigging”, specialized internal inspection devices (smart pigs) travel through the pipeline collecting data

Pipeline Maintenance



Investigative Digs:

- Excavate sections of the pipeline to investigate condition and integrity

Aerial Patrols:

- We inspect the pipeline route weekly in Vaughan using helicopters
- We also regularly use sensitive leak detection equipment during these patrols to identify small leaks



Engagement



A proposed route has been identified

- Options are still being considered based on stakeholder feedback

Route will be refined to reflect:

- Aboriginal & Stakeholder input
- Environmental assessments
- Engineering studies



Contacting the Project Team



- The team will be accessible throughout the project and there are a number of ways to communicate with us which can be found on our project materials:

- Email KingsNorth@TransCanada.com
- Toll-free dedicated project phone line 1.855.895.8752
- Website KingsNorthConnection.com

Proposed Route



Map - See separate PDF document

Proposed King's North Connection Project



Thank You